

**(19) World Intellectual Property
Organization
International Bureau**



(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number
WO 2004/052216 A1

(51) International Patent Classification⁷: A61B 17/16

(74) Agent: BELCHER, Simon, James; Urquhart-Dykes & Lord LLP, Tower House, Merriion Way, Leeds LS2 8PA (GB).

(21) International Application Number:
PCT/GB2003/005437

(22) International Filing Date:
11 December 2003 (11.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0228964.3 12 December 2002 (12.12.2002) GB

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GI, GL, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (for all designated States except US): DEPUY INTERNATIONAL LIMITED [GB/GB]; St Anthony's Road, Beeston, Leeds LS11 8DT (GB).

(84) Designated States (regional): ARIPO patent (BW, GI, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

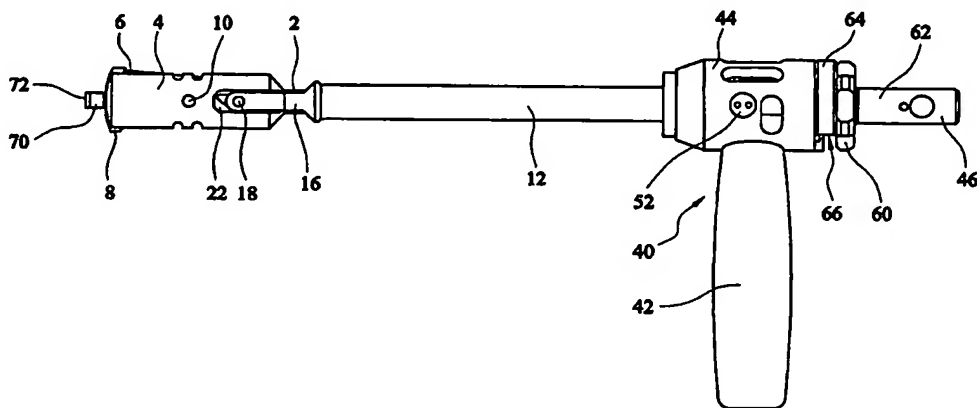
(75) Inventors/Applicants (for US only): GRAVES, William [AU/AU]; 33 Kelmar Street, Cheltenham, Victoria 3192 (AU). **SONNABEND, David, Harry** [AU/AU]; 55a Cranbrook Road, Rose Bay, NSW 2029 (AU). **WALSH, William, Robert** [AU/AU]; 16 Kitchener Street, Macoubra, NSW 2035 (AU).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BONE RESECTION DEVICE



(57) Abstract: A bone resection device for use in resection of bone during joint replacement surgery comprises a cutting tool housing (4), and at least one cutting tool (6, 8) which is fastened to the housing so that it can be moved reversibly between a retracted position and an extended position, in which it extends further from the housing in the extended position than in the retracted position. The cutting tool housing is attached to an elongate shaft (2) at or towards one end, the shaft having a control region at its other end from which the resection device is controlled while the cutting tool housing is located in the vicinity of bone tissue which is to be resected. The resection device includes a device (12) for controlling the position of the cutting tool relative to the housing, the device extending along the shaft and being movable relative to the shaft along the axis defined by the shaft, and being rotatable relative to the shaft around the said axis, the device engaging the cutting tool by means of a cam arrangement in which one of the control device and the cutting tool has an elongate cam track (34) formed in it and the other has a reciprocating follower (18) which can slide in the track, the track being non-parallel to the axis of the shaft. Movement of the control device along the shaft causes relative movement of the follower along the cam track, to cause the position of the cutting tool relative to the housing to change.

WO 2004/052216 A1